

REMARKS

Reconsideration and withdrawal of the rejections set forth in the Office Action dated May 9, 2002 are respectfully requested. The applicant petitions the Commissioner for a one (1) month extension of time: a separate petition accompanies this amendment.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached pages are captioned "Version with markings to show changes made."

I. Amendments

This amendment is in response to the Office Action mailed May 9, 2002. Claims 1-34 were pending in the application. Claims 1, 11, 16, 26, 27, 29, and 30 have been amended. Claim 31 has been canceled. No claims have been allowed.

In the Office Action of May 9, 2002 the Examiner identified that spelling errors contained on page 19, line 1 of the substitute paragraph, "fo a entertainment", where not included in the caption version. Correspondingly, and with acknowledgment by the Examiner, a revised substitute paragraph is submitted. The new paragraph is captioned against the ORIGINAL paragraph as filed on March 3, 2000 and not the amended paragraph filed on March 4, 2002. Likewise, the Examiner identified that the captioned version of claims 1 and 16 did not correctly correspond to the original claims. In the same manner as above, the newly amended claims 1 and 16 are captioned against the ORIGINAL claim 1 and the ORIGINAL claim 16 as filed on March 3, 2000.

II. Rejections under 35 U.S.C. §103

A. The Invention

The Applicant discloses a method and apparatus for providing to a user digital content on demand. The user is provided an experience of being presented a large list of immediately available local content from which the user may select and immediately experience his or her selection. In a situation where the content is not stored locally, the user is provided access to a large database or master list of available content that may be downloaded locally to a local cache and offered to the user for immediate enjoyment.

B. Kleiman Teaches a Periodic Retrieval of Music based on Statistical User Requests

Kleiman discloses a system for selectively distributing music to a number of jukeboxes. The system includes a global distribution platform and regional distribution platform that is hierarchical in nature. *See Kleiman* at Figure 1. Kleiman only provides music on demand for those virtual electronic titles already stored on the jukebox. The titles stored on the jukebox are determined by sensing the music demand of the users and statically determining what additional songs should be downloaded and stored on the jukebox. *See Kleiman* at Col. 6, lines 49-59 and Col. 8, line 63 – Col. 9, line 5. Only popular individual songs of an album are stored and available locally. *See Kleiman* at Col. 9, lines 34-39. Kleiman teaches that direct on-line access of songs would be cost prohibitive. Kleiman responds by periodically retrieving statistically identified new music within a broader time range such as two days. *See Kleiman* at Col. 9, lines 56-62.

C. Kleiman Teaches Away from the Applicant's Invention by Not Offering an On Demand Retrieval of Entertainment Content

Kleiman fails to motivate one of ordinary skill in the art to provide a system for on demand electronic entertainment. The Examiner rejects claims 1-3, 6-8, 11, 14, 15-18, and 24-34 as being unpatentable under 35 U.S.C. §103(a) over Kleiman. Kleiman, however, provides a system for on demand service of music limited to titles stored locally on a jukebox. Songs or electronic entertainment that is not stored locally is not available on demand. The Applicant's claimed invention provides not only locally stored music on demand, but also music selected from a master list, stored at a remote site and conveyed to the user via a WAN or LAN such as the Internet.

Kleiman does not suggest or motivate one of ordinary skill in the art to offer music stored remotely on an on demand basis. Kleiman teaches away from such instant access by indicating that on-line access to songs would be prohibitively costly. Kleiman teaches in the alternative that songs not located on the internal storage device of the jukebox can be downloaded periodically once a demand for the songs has been statistically identified. Apparently, if only a single user demands a song he or she would fail to gain statistical clout to warrant the download of the music during the next update. Thus, for that user, Kleiman would apparently not be an on demand system. The Applicant's claimed invention provides remotely stored music on demand

by downloading the content to a cache that is then immediately presented to the user. This innovation and novel approach to on demand electronic entertainment is not suggested by Kleiman. Accordingly the Applicant respectfully submits that Kleiman does not render claims 1-3, 6-8, 11, 14, 15-18, and 24-34 as amended obvious under 35 U.S.C. §103(a) and requests the withdrawal of the rejection.

D. The Examiner's Official Notice Does Not Accurately Portray the State of the Art as of 2 March 1999

The Examiner rejects claims 1-3, 6-8, 11, 14, 15-18, and 24-34 as being obvious in view of an Official Notice referenced in an office action dated 2 October 2001. In that office action the Examiner contends that IBM PC-compatible computers where widely known and were widely known to be compatible of playing download music from the Internet. The Examiner also took notice that the use of LANs and WANs to connect these machines to the Internet was widely known. From these notices, the Examiner concludes that it would have been obvious to provide a user with entertainment consisting of music through a LAN connected to a WAN using the capability of a personal computer.

The Applicant respectfully traverses the Examiner's conclusion and believes the facts as described by the Examiner do not accurately portray the state of the art as of 2 March 1999. While IBM personal computers capable of playing music and the Internet where well known in March of 1999, the Applicant contends that the providing of a device and method to enjoy a wide variety of music selections at a single location as described in the claims is novel. At the time of the Examiner's Official Notice the Internet was faced with bandwidth challenges that inspired dramatic alterations to WAN and LAN structures. The bandwidth limitation also limited downloading and uploading of digital content such as music. Kleiman identified this need by disclosing in the background section that the cost of transferring large files such as songs can be cost prohibitive for a computerized jukebox using a central music storage location. *See Kleiman* at Col. 3, lines 20-25. While there was a need for a device and method to provide a user with access to a wide selection of entertainment media, no such device or method was available. The Applicant met this need by creating a novel device and method for providing a user a wide selection of entertainment media while minimizing the need for a high bandwidth connection with the Internet via a LAN or WAN. The long sought need and commercial success of the

Applicant's design is evidence of the novelty of the Applicant's claimed invention. Correspondingly, the Applicant respectfully requests the rejection based on the Examiner's Official Notice be withdrawn.

E. Bernstein does not solve the deficiencies identified in Kleiman

Bernstein discloses a kiosk having a web browser that includes software for controlling user access to certain capabilities of the system. Bernstein does not offer any suggestions or motivations for creating or using a master list from which to select music not stored locally on the jukebox. Nor does Bernstein suggest that content stored remotely to the jukebox should or could be provided to a user on an on demand basis. As Bernstein fails to address the basic deficiencies of Kleiman, the Examiner's corresponding rejections of claims 5, 9, 12, 13, and 19-23 as applied to claims 1-3, 6-8, 11, 14, 15-18, and 24-34 are moot. The Applicant respectfully submits that the combination of Kleiman in view of Bernstein fails to contain, motivate, suggest all of the elements of the Applicant's claimed invention. Accordingly, the Applicant requests the rejection be withdrawn.

F. Billock Teaches an on Demand Telecasting Service

Billock discloses a telecasting service providing video programs on demand. *See Billock* abstract. Billock describes a service where a user may select video programs for a list or preview video programs from which a selection may be made. *See Billock* figures 9D-9H. The digital content is received at the user site, decompressed and viewed on the video monitor or television or similar device. *See Billock* col. 3, lines 3-5. The interactive interface of Billock includes a memory for storing a list of available programs and a segment or preview of each program. *See Billock* col. 3, lines 10-13. Other than the list of available programs or a short preview of each program, the complete program or content resides on digital media remote from the user. Once the program is selected by the user, a temporary copy is placed on a mass storage system that is also remote from the user. *See Billock* col. 5, lines 25-30. The content residing on the mass storage system is telecast to the viewing system or station for presentation.

Data received by the viewing station is processed by a graphics computer. This processing may include reassembling of data packets, video decompression, and synchronization of audio and video programs. *See Billock* col. 8, lines 48-55. Upon synchronization, the program is provided to a monitor or television for viewing. As the program may last several

hours, the steps of assembly, decompression and synchronization may be repeated several times.

See Billock col. 17, lines 53-59.

G. Billock fails to Download and Store Content in its Entirety Prior to the Content's Presentation to the User

Claims 1-34 stand rejected under 35 U.S.C. §103(a) by the Examiner as being obvious in view of Billock. Billock fails to describe all the elements of the Applicant's claimed invention. While Billock downloads digital content on an on demand basis, the content is telecast. Billock downloads a portion or small packet of data that is decompressed and then presented on a monitor or television. During this process, the entire user selection is never completely located at the user site nor is the content ever stored locally at the user site during its presentation. Furthermore, the list of content available to the user is located on the user machine that is updated periodically and is not a true on demand selection list as claimed by the Applicant. As Billock does not provide an on demand electronic entertainment system as claimed by the Applicant, the Applicant respectfully submits that Billock does not render the Applicant's claimed invention obvious under 35 U.S.C. §103(a). Accordingly, the Applicant requests the rejection be withdrawn.

H. Cook discloses a Method for Selecting and Manufacturing Customized Compact Disks

Cook discloses a custom compact disk assembly, manufacturing and distribution method and system. Cook enables a user to assemble or create a set of musical recordings from a library and assemble or burn the musical recordings onto a removable physical medium such as a compact disk. *See Cook at Col. 1, lines 44-52.* The user selects a set of recordings from a centralized list from a number of linked storage devices forming a virtual list of available songs. *See Cook at Col. 4, lines 41-44.* Remotely from the user, a burner facility compiles the set of music and transfers the digital data to a static storage medium such as a compact disk. *See Cook at Col. 8, lines 13-16.* Once created, the compact disk is shipped to the user via convention means. *See Cook at Col. 10, lines 23-45.* Alternatively, Cook teaches that the user may burn the music into a physical medium directly. *See Cook at Col. 10, lines 60-63.*

Cook Fails to Provide a On-Demand System for Experiencing Electronic Entertainment

Claims 1-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable in view Cook. Cook, however, fails to describe an on demand system for electronic entertainment. Cook teaches a means to produce a static copy of a set of music selections. The content selected by the user is placed on a removable static media that is distinct from the Applicant's on demand system of electronic entertainment. In Cook, a user selects music titles from a master list via the Internet, a WAN or associated LAN. No portion of the list is local to the user during this process. The Examiner contends that that Cook discloses a data product that is transferred over a computer network using a WAN or LAN. As mentioned herein, Cook does not apparently describe a selection of the data from a local list of locally stored data but alternatively identifies and burns a static copy of content from a remote master list of music. Cook does not suggest or motivate one of ordinary skill in the art to provide an on demand system of electronic entertainment as claimed by the Applicant. As Cook does not disclose all of the elements of the Applicant's invention, the Applicant submits the claimed invention is patentable in view of Cook and requests the rejection be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims are in condition for allowance. The Examiner is respectfully requested to telephone the undersigned at (650) 838-4406 if any issues remain to be resolved before allowance of the claims.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Figure 8 is a block diagram of an embodiment of an entertainment unit 1100. User 1002 interacts with user interface 1006. Through the user interface 1006, the user may access a music selection GUI 1040 and game selection GUI 1042, and the web browser 1012. In some embodiments, the user interface 1006 also allows the user to order food, beverages, or any other product or service provided by the venue. In one embodiment, user ID logic 1004 queries the user for ID information, which may be input by using a keyboard or a touchscreen, by providing a thumbprint, or by allowing a photograph of the user's face to be taken. If the user has previously submitted data (such as ID number, thumbprint or facial image) that data is stored along with charge account data for the user. Stored data is compared with currently collected data. If the comparison yields a match, the user is successfully identified and any stored information about the user may be accessed to make the interaction with the entertainment unit faster and more enjoyable. For example, the user may have account information stored that allows the entertainment unit to automatically debit a user account ~~using~~ for any charges incurred by the user in the venue using user account logic 1008. The user may also store preferences, such as game and music preferences. The user may also store data that the user wishes to see automatically displayed on the web browser, such as certain news reports and stock quotes.

Please note: The red-line version of claims 1 and 16 reflect revisions from the original claims as filed and discussed during an Examiner interview on Thursday, August 8, 2002. A complete set of claims follows:

1. (Twice Amended) A distributed entertainment system comprising:
a central resource coupled to a wide area network (WAN), wherein the central resource includes a central content storage module that stores entertainment content, including a master list of entertainment content items available through the WAN;
at least one entertainment unit coupled to ~~a wide area network~~ the WAN (WAN), the at least one entertainment unit comprising,

a user interface, comprising at least one graphical user interface (GUI);
a local memory device that stores two or more sets of entertainment content grouped according to a common characteristiccomprising music;
a local list of the entertainment content stored on the local memory device;
a local cache capable of storing entertainment content requested from the master list;
a peripheral interface; and
a user input device; and

a plurality of peripheral devices coupled to the at least one entertainment unit via the peripheral interface, wherein a user, through the user input device and the user interface, views the master list and the local list of entertainment content items, and requests an item from the master list or the local list, wherein if the requested item is requested from the master list the requested item is stored on the WAN, the requested item is transferred to the local cache, and immediately performed locally in response to the request. performs at least one activity from a group comprising,

playing music;
playing electronic games;
viewing television content, multimedia, film, full screen, video; and
browsing the Internet.

2. (Amended) The distributed entertainment system of claim 1, wherein multiple entertainment units are coupled to each other via a local area network (LAN), and wherein one of the multiple entertainment units is coupled to the WAN.

3. The distributed entertainment system of claim 1, wherein multiple entertainment units are coupled to each other via a local area network (LAN), and wherein each of the multiple entertainment units is coupled to the WAN.

4. The distributed entertainment system of claim 1, wherein the at least one entertainment unit further comprises an infrared (IR) receiver/transmitter for transferring data

and commands from the at least one entertainment unit and for receiving data and commands in the at least one entertainment unit.

5. The distributed entertainment system of claim 1, wherein the plurality of peripheral devices comprises:

at least one user identification (ID) device selected from a group comprising,

a thumbprint recognition device; and

a facial recognition device;

a video unit comprising hardware and software for capturing and processing images; and

at least one payment device selected from a group comprising,

a coin acceptor;

a bill acceptor; and

a credit card/smart card reader.

6. The distributed entertainment system of claim 1, wherein the at least one entertainment unit further comprises an audio unit comprising audio speakers and hardware and software for playing music.

7. The distributed entertainment system of claim 1, further comprising a central management resource coupled to the at least one entertainment unit via the WAN, the central management resource comprising:

a management module that performs administrative functions;

a monitoring module that monitors system components and collects and stores data related to system usage;

and

a content delivery module that controls delivery of entertainment content from the central content storage module to the at least one entertainment unit.

8. The distributed entertainment system of claim 7, wherein the central management resource further comprises:

master content management logic that manages entertainment content in the at least one entertainment unit;

a master activity log that stores data regarding activity of the at least one entertainment unit;

a master attract loop database that stores attract loops available to the at least one entertainment unit, wherein each of the attract loops comprise electronic data that may be displayed to show advertisements and activities that are available on the at least one entertainment unit; and

a user database that stores information relating to previously established user accounts.

9. The distributed entertainment system of claim 8, further comprising a content processing module comprising:

recorded media comprising music data recorded in an electronic format on a medium;

digital encoding hardware and software coupled to the recorded media that receives the music data, and digitally encodes the music to produce digitally encoded music data;

an intermediate storage device coupled to the digital encoding hardware that receives and stores the digitally encoded music data;

compression hardware and software coupled to the intermediate storage device, wherein the compression hardware and software receives the digitally encoded music data, and compresses the digitally encoded music data.

10. The distributed entertainment system of claim 9, wherein the music data includes music identifying information, music files, and album art.

11. (Twice Amended) A network entertainment unit comprising:

a local area network (LAN) interface through which the network entertainment unit may communicate with similar network entertainment units in a venue;

a wide area network (WAN) interface through which the network entertainment unit may communicate with a central management resource remote from the venue;

a user interface, comprising at least one graphical user interface (GUI);

a local memory device that stores entertainment content;

a local memory cache;

a peripheral interface; and

a user input device, wherein a user, through the user input device and the user interface, views a master list of entertainment content items stored on the WAN, and requests an item from the master list, wherein the requested item is transferred to the local memory cache and immediately performed locally in response to the request, wherein it is not required that the selected item is among the entertainment content stored on the local memory device.

12. The network entertainment unit of claim 11, further comprising an infrared (IR) receiver/transmitter for transferring data and commands from the entertainment unit and for receiving data and commands in the entertainment unit.

13. The network entertainment unit of claim 11, further comprising a plurality of peripheral devices coupled to the network entertainment unit, the plurality of peripheral devices comprising:

at least one user identification (ID) device selected from a group comprising,

a thumbprint recognition device; and

a facial recognition device;

a video unit comprising hardware and software for capturing and processing images; and at least one payment device selected from a group comprising,

a coin acceptor;

a bill acceptor; and

a credit card/smart card reader.

14. The network entertainment unit of claim 11, further comprising an audio unit comprising audio speakers and hardware and software for playing music.

15. The network entertainment unit of claim 11, wherein the at least one GUI comprises:

a music selection GUI through which the user may choose music from the master list to be played in the venue; and

a game selection GUI through which the user may choose games from the master list to be played in the venue.

16. (Twice Amended) A method for electronic entertainment, comprising:

at an entertainment unit in a venue coupled to a local area network (LAN) and a wide area network (WAN), receiving a request for an item of entertainment content from a user, wherein the request includes a selection from a list of entertainment content, the list including a master list of entertainment content stored in at least one location on a network and a list of local content stored on a memory device on the entertainment unit, the local content grouped according to a common characteristic;

supplying the requested entertainment content to the user from a the memory device on the entertainment unit, or if the requested entertainment content is not available on the memory device of the entertainment unit;

transmitting the request via the LAN a local area network (LAN) to a different entertainment unit in the venue;

supplying the requested entertainment content to the user from a memory device on the different entertainment unit, or if the requested entertainment content is not available on the memory device of the different entertainment unit;

transmitting the request via the WAN a wide area network (WAN) to a central management resource remote from the venue; and

supplying the requested entertainment content to the user from a memory device on the central management resource, wherein the entertainment content comprises music and electronic games;

receiving the requested entertainment content at the entertainment unit in the venue;

storing the requested entertainment content in a local cache, the local cache being distinct from the memory device of the entertainment unit; and

presenting the entertainment content to the user immediately upon successful delivery to the entertainment unit.

17. The method of claim 16, further comprising:

at the entertainment unit in the venue, receiving an input indicating an identity of the user;
accessing a user account with the identity of the user; and
charging the user account for supplied entertainment content.

18. The method of claim 17, further comprising:

receiving a request to purchase products available at the venue; and
charging the user account for any requested products that are supplied to the user.

19. The method of claim 16, further comprising:

at the entertainment unit, querying the user whether the user wishes to establish an identity;
receiving an input from the user indicating the identity of the user;
converting the input to a user identity;
receiving charge account information from the user; and
associating the user identity with the charge account information, wherein the input is selected from a group comprising.
an alphanumeric identification;
a thumbprint; and
a facial image.

20. The method of claim 16, further comprising receiving a request from the user to browse the World Wide Web (web) and in response, giving the user access to the web at the entertainment unit.

21. The method of claim 16, further comprising maintaining an activity log that stores a record of activity on the entertainment unit, wherein the activity comprises requests and purchases by the user.

22. The method of claim 16, further comprising:
displaying to the user a list of available music, including graphical images;
receiving an indication from the user that the user wishes to purchase selected music from
the list; and
automatically accessing a web site that offers the selected music for sale.

23. The method of claim 22, further comprising downloading the selected music from
the entertainment unit to a mobile user device using a wireless communication method.

24. The distributed entertainment system of claim 1, wherein stored on the WAN
comprises, stored on the central content storage unit, and stored on the local memory device.

25. The distributed entertainment system of claim 7, wherein the central management
resource further comprises:

a master music information database that stores a master list of music available to the at
least one entertainment unit; and

a master game database that stores information about games available to the at least one
entertainment unit, wherein the master list of music and the information about games are
included in the master list of entertainment content items available through the WAN.

26. (Amended) A method of content distribution in a content distribution system for
electronic entertainment devices on a network, the method comprising:

storing entertainment content and information regarding the entertainment content in
distributed locations on the network;

displaying a master list on an entertainment device on the network, wherein the master
list includes information regarding all of the entertainment content on the network and the
entertainment content stored locally on the entertainment device;

receiving a user selection of entertainment content located on the network selected from
the master list;

locating the requested content on the network, wherein the requested content is stored in one or more locations comprising a central storage unit and a local storage unit in the one or more different entertainment devices; and

transferring the requested content to the entertainment device; and

performing the requested content immediately on the entertainment device upon successful transfer of the electronic content, regardless of the location of the requested content.

27. (Amended) The method of claim 26, further comprising, if the requested content is located in the central storage unit, transferring the requested content over the network to the entertainment unit, wherein transferring includes:

storing the requested content in the local storage unit, and performing the requested content on the entertainment unit cache; and

streaming the requested content over the network for performance on the entertainment unit.

28. The method of claim 26, wherein the requested content is transferred using a method chosen from a group comprising transmission protocol over Internet protocol (TCP/IP), and asynchronous transfer mode (ATM).

29. (Amended) A content distribution system for electronic entertainment devices on a network, comprising:

a central resource coupled to the network, including a central storage unit, wherein the central storage unit stores entertainment content and a master list of available entertainment content available on the network;

at least one electronic entertainment device coupled to the network, including a local storage unit, a local cache, and a user interface, wherein a user views the master a local list of entertainment content stored on the entertainment device with the user interface and the master list of entertainment available on the network with the user interface and selects entertainment content, and wherein in response to the selection,

the at least one electronic entertainment device determines whether the selected entertainment content is stored in the local storage unit;

if the selected entertainment content is stored in the local storage unit of the entertainment device, the selected entertainment content is performed on the electronic entertainment device from the local storage unit; and

if the selected entertainment content is not stored in the local storage unit, the selected entertainment content is requested over the network, transferred to the local cache on the entertainment device, and performed on the electronic entertainment device when immediately after being received.

30. (Amended) The content distribution system of claim 29, wherein the received entertainment content is stored in the local storage unit and performed from the local storage units is grouped by a common characteristic.

Cancelled 31. The content distribution system of claim 29, wherein the received entertainment content is performed on the electronic entertainment device by streaming data over the network.

32. The content distribution system of claim 29, wherein the network comprises at least one local area network (LAN) and at least one wide area network (WAN).

33. The content distribution system of claim 29, wherein the central resource further comprises master content management logic that manages distribution of entertainment content over the network, wherein distribution comprises:

initially storing all of the entertainment content on the master list on the central storage unit;

in response to a user request from an electronic entertainment unit for entertainment content, transferring the requested entertainment content to the electronic entertainment unit;

determining whether a local storage unit of the electronic entertainment unit is full; and

if the local storage unit of the electronic entertainment unit is full, notifying the central resource.

34. The content distribution system of claim 29, wherein the at least one electronic entertainment unit includes an activity log that stores information regarding entertainment content usage and fee payment.